



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------------|------------------|
| 10/776,912 | 02/11/2004 | Walter Brandenburger | 331.1056 | 3055 |
| 23280 | 7590 | 03/30/2006 | | |
| DAVIDSON, DAVIDSON & KAPPEL, LLC 485 SEVENTH AVENUE, 14TH FLOOR NEW YORK, NY 10018 | | | EXAMINER BROWN, DREW J | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 3616 | |
| DATE MAILED: 03/30/2006 | | | | |

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|--------------------------------------|--|--|
| Office Action Summary | Application No. 10/776,912 | Applicant(s) BRANDENBURGER, WALTER | |
| | Examiner Drew J. Brown | Art Unit 3616 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 and 9 is/are rejected.
- 7) ☒ Claim(s) 7 and 8 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>2/11/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

1. Claims 1, 4, 6, and 9 are objected to because of the following informalities:

In line 7 of claim 1, "directional control" should be changed to --directional control valve--.

In line 3 of claim 4, "directional flow-control spool." should be changed to --directional flow-control spool valve--.

In line 2 of claim 6, "includes bypass line" should be changed to --includes a bypass line--.

In line 2 of claim 9, "correponds" should be changed to --corresponds--.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 3-6, and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rogala (U.S. Pat. No. 6,394,238 B1).

With respect to claim 1, Rogala discloses a pressurized oil pump (P), a reservoir (T), a first directional control valve (36) in fluid communication with the pressurized oil pump and configured to adjust a level position of the suspension system upward (column 5, lines 36-54), and a second 2/2 directional control valve (50) in fluid communication with the reservoir and configured to adjust the level position downward (column 5, lines 66-67 and column 6, lines 1-14).

Although Rogala discloses a first directional control valve, the valve is a 4/2 directional control valve rather than a 2/2 directional control valve. However, it would have been obvious to

Art Unit: 3616

one having ordinary skill in the art at the time the invention was made to use separate the 4/2 directional control valve by using two 2/2 directional control valves (column 3, lines 36-38), since it has been held that constructing a formerly integral structure in various elements involves only routine skill in the art. Also, a simpler circuit is created when using 2/2 directional control valves rather than a 4/2 directional control valve.

With respect to claim 3, Rogala discloses an annular-space suspension circuit (30), a pressure line (37) connecting the first 2/2 directional control valve to the annular-space suspension circuit, and a pressure-controlled 2/2 directional flow-control spool valve disposed in the pressure line.

Although Rogala discloses spool valves, the spool valves are not specifically claimed to be 2/2 directional flow-control spool valves. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use 2/2 directional flow-control valves in order to stay consistent with the 2/2 directional control valves.

With respect to claim 4, a non-return valve (40) and a throttle (44) are disposed in the pressure line downstream from the 2/2 directional flow-control spool valve.

With respect to claim 5, a relief line (line containing node 70) is disclosed in the annular-space suspension circuit and a pressure-limiting valve (79) is disposed in the relief line.

With respect to claim 6, the relief line of the annular-space suspension circuit includes a bypass line (line containing node 66) by-passing the pressure-limiting valve, where the relief line includes a blocking valve (64).

With respect to claim 9, the vehicle is a tractor (10) and wherein the level position corresponds to a front axle (14) of the tractor.

4. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rogala in view of Tyler (U.S. Pat. No. 5,318,354).

With respect to claim 2, Rogala discloses the claimed invention as discussed above but does not disclose that the first and second 2/2 directional control valves are directional seat valves. However, Tyler does disclose that a direction control valve can be a seat valve (column 8, lines 9-11). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the invention of Rogala in view of the teachings of

Art Unit: 3616

Tyler to use seat valves in order to create a desired area to allow smooth fluid flow to occur when necessary (column 3, lines 1-2).

Allowable Subject Matter

5. Claims 7 and 8 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion


6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Peiffer, Brandenburger, Frankle et al., Kasamatsu, Rogala et al., Elser et al., Griebel et al., Kauss, Altherr et al., Haupt, Wallestad, and Deininger et al. disclose similar suspension systems.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Drew J. Brown whose telephone number is 571-272-1362. The examiner can normally be reached on Monday-Thursday from 8 a.m. to 4 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul N. Dickson can be reached on 571-272-6669. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Drew J. Brown
Examiner
Art Unit 3616


DAVID R. DUNN
PRIMARY EXAMINER

DJB
3/27/06